

National Rehabilitation Hospital
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 E-MAIL Suzanne.L.Groah@Medstar.net

Suzanne L. Groah, MD, MSPH

Date of Birth April 18, 1966

Place of Birth Falls Church, Virginia

Medical Licensure District of Columbia # MD33585

Board Certification 1997 – present American Board of PM&R (#5357)
 2004 – present Spinal Cord Injury Subspecialty
 Certification(#446)

Education 1996 – 1999 University of Colorado Health Sciences Center Denver, CO
MSPH
 1988 – 1992 Medical College of Virginia Richmond, VA
MD
 1984 – 1988 Mary Washington College Fredericksburg, VA
BS – Biology

Professional Experience 2002 – present National Rehabilitation Hospital Washington, DC
Director – Spinal Cord Injury Consultation Liaison Service
Director – Spinal Cord Injury Research
 2005 – present Georgetown University Hospital Washington, DC
Assistant Professor – Rehabilitation Medicine
 1999 – 2002 Santa Clara Valley Medical Center San Jose, CA
Associate Chief - Physical Medicine & Rehabilitation
Medical Director - Inpatient Spinal Cord Injury Rehabilitation
Director - Spinal Cord Injury Research
 1999 - 2002 Stanford University Palo Alto, CA
Clinical Instructor - Department of Functional Restoration
 1998 – 1999 Craig Hospital Englewood, CO
Clinical Fellowship – Neurorehabilitation
 1996 – 1998 University of Colorado Health Sciences Center & Craig Hospital Denver, CO

Research Fellowship – Aging with Spinal Cord Injury

1993 – 1996 Medical College of Virginia Richmond, VA

Residency – Physical Medicine and Rehabilitation

1992 – 1993 Riverside Regional Med. Center Newport News, VA
Internship – Transitional Program

Academic Affiliation

2005 - present Georgetown University Medical Center
Assistant Professor

Peer Reviewed Publications

Groah S, Nash MS, Ljungberg IH, Libin A, Hamm LF, Ward E, Burns PA, Enfield G. Nutrient intake and body habitus after spinal cord injury: An analysis by sex and level of injury. *Journal of Spinal Cord Medicine* 2009;32:17-25.

Feasel S, **Groah S**. The impact of diet on cardiovascular disease risk in individuals with spinal cord injury. *Topics of SCI Rehabilitation* 2009;Winter 14(3):58-68.

Groah S, Spungen M, Bauman W. Cardiovascular disease in individuals with spinal cord injury: toward best practice. *Topics of SCI Rehabilitation* 2009;Winter 14(3): in press.

Kroll T, **Groah S**, Neri M, Gilmore B. Consumer-directed teaching of health care professionals involved in the care of people with spinal cord injury: The Consumer Professional Partnership Program (CPPP). *J Cont Educ Nurs* 2008;39(5):228-34.

Hidler J, Hamm L, Lichy A, **Groah S**. Automating activity-based interventions: the role of robotics. *Journal of Rehabilitation Research and Development* 2008;45(2):337-44.

Lewis J, Nash MS, Hamm LF, Martins SC, **Groah SL**. The relationship between perceived exertion and physiological indicators of stress during graded arm exercise in persons with spinal cord injuries. *Archives of Physical Medicine and Rehabilitation* 2007;88(9):1205-11.

Kroll, T, **Groah, S.**, Gilmore, B. Neri, M., Elrod, M., Libin, A. First experiences with the Consumer Professional Partnership Program (CPPP): Involving people with spinal cord injury in the education of rehabilitation professionals. *International Journal of Therapy and Rehabilitation*. *Int J Ther Rehabil* 2007;14(7):299.

Kroll T, Kehn M, Ho P-S, **Groah S**. The spinal cord injury exercise self-efficacy scale (ESES): Development and psychometric properties. *Int J Behav Nutr Phys Activity* 2007 Aug 30;4:34.

Groah SL, Lammertse DP. Factors associated with survival after bladder cancer in spinal cord injury. *J Spinal Cord Med* 2003 Winter;26(4):339-44.

Kirshblum S, **Groah S**, McKinley W, Stiens S, Gittler M. Spinal cord injury medicine: Etiology, classification, and acute medical management. *Archives of Physical Medicine and Rehabilitation* 2002;83(3)Suppl 1:S50-S57.

McKinley W, Gittler M, Kirshblum S, Stiens S, **Groah S**. Spinal cord injury medicine. Medical complications after spinal cord injury: Identification and management. *Archives of Physical Medicine and Rehabilitation* 2002;83(3)Suppl 1:S58-S64.

Gittler M, McKinley W, **Groah S**, Kirshblum S, Stiens S. Spinal cord injury medicine: Rehabilitation outcomes. *Archives of Physical Medicine and Rehabilitation* 2002;83(3)Suppl 1:S65-S71.

Stiens S, **Groah S**, Gittler M, McKinley W, Kirshblum S. Spinal cord injury medicine. Optimal participation in life after spinal cord injury: Physical, psychosocial, and economic reintegration into the environment. *Archives of Physical Medicine and Rehabilitation* 2002;83(3)Suppl 1:S72-S81.

Groah S, Kirshblum S, Stiens S, Gittler M, McKinley W. Spinal cord injury medicine. Preserving wellness and independence of the aging patient with spinal cord injury: A primary care approach for the rehabilitation medicine specialist. *Archives of Physical Medicine and Rehabilitation* 2002;83(3)Suppl 1:S82-S89.

Groah S, Weitzenkamp D, Lezotte D, Whiteneck G, Hamman R. Excess risk of bladder cancer in spinal cord injury: Evidence for an association between indwelling catheter use and bladder cancer. *Archives of Physical Medicine and Rehabilitation* 2002;83(3):346-51.

Yung J, **Groah S**. Crohn's disease in the acute spinal cord injury patient: Diagnostic challenges in the rehabilitation setting. *Archives of Physical Medicine and Rehabilitation* 2001;82(9):1274-8.

Groah S, Weitzenkamp D, Sett P, Soni B, Savic G. The relationship between neurologic level of injury and symptomatic cardiovascular disease risk in the aging spinal injured. *Spinal Cord* 2001;39(6):310-317.

Groah S, Menter R. Long-term cardiac ischemia leading to coronary artery bypass grafting in a tetraplegic person. *Archives of Physical Medicine and Rehabilitation* 1998;79:1129-32.

Groah S, Charlifue S, Weitzenkamp D, Whiteneck G. The risk of coronary heart disease in the aging spinal cord injured. *Archives of Physical Medicine and Rehabilitation* 1997;78:1026.

Groah S, Cifu D. The rehabilitative management of the traumatic brain injured polytrauma patient with associated femoral neuropathy. *Archives of Physical Medicine and Rehabilitation* 1995;76:480-484.

Other Publications

Groah SL., *Managing spinal cord injury: a guide to living well with spinal cord injury*, ed. **S. Groah**. 2005, Washington, DC: NRH Press. 386.

Rogers J, **Groah SL**. Chapter 12: *So, you're having a baby?*, in *Managing spinal cord injury: A guide to living well after spinal cord injury*. S. Groah, Editor. 2005, NRH Press: Washington, DC. P. 205-225.

Groah SL. Chapter 14: *Secondary conditions and other little surprises as you age with your spinal cord injury*, in *Managing spinal cord injury: A guide to living well after spinal cord injury*. S. Groah, Editor. 2005, NRH Press: Washington, DC: p. 244-260.

Groah SL. Chapter 4: *Taking charge of your life*, in *Managing spinal cord injury: A guide to living well after spinal cord injury*. S. Groah, Editor. 2005, NRH Press: Washington, DC. P 69-75.

Ballard P, **Groah SL**. Chapter 1: *Understanding spinal cord injury*, in *Managing spinal cord injury: A guide to living well after spinal cord injury*, S. Groah, Editor. 2005, NRH Press: Washington, DC. P 1-28.

Groah S. Chapter 17: Clinical Exercise Testing in Individuals with Disabilities Due to Neuromuscular Disorders. In: The American College of Sports Medicine's Resource Manual for Exercise Testing and Prescription.

Groah S, Lanig I. Neuromusculoskeletal syndromes in wheelchair athletes. *Seminars in Neurology* 2000;20(2):201-7.

Presentations

Ramella-Roman J, **Groah S**, Libin A. Use of a multi-aperture spectral camera for the assessment of skin wound healing. 29th Annual Conference of the American Society for Laser Medicine and Surgery (Accepted for presentation in May, 2009).

Libin A, **Groah S**, Spungen M, Myers C, Lauderdale D. Concept formation of injury prevention in preschool children: implementing the Healthy Tomorrow Curriculum. A Roundtable Discussion American Public Health Association Annuation Conference (Accepted for publication in November, 2008)

Halstead L, **Groah S**, Priestley L, Hamm L. The Effects of a Trial with an Anabolic Agent in Healthy Persons with Tetraplegia: Case Series ASIA Annual Meeting (Accepted for presentation, June 2008)

Lauderdale M, Libin A, Spungen M, Myers C, Groah S. Insights into understanding of safety and injury prevention in 3-5 year old children. ASIA Annual Meeting (Accepted for presentation, June 2008)

Libin A, Lauderdale D, Spungen M, Myers C, **Groah S**. Healthy Tomorrow: Formation of disability awareness and empathy in preschool children ASIA Annual Meeting (Accepted for presentation, June 2008)

Elrod M, Ljunberg I, Ward E, **Groah S**, Nash M. Correlation of Level of Fitness and Cholesterol Levels for Individuals with Spinal Cord Injury

ASIA Annual Meeting (Accepted for presentation, June 2008)

Hsieh C, Libin A, Spungen M, **Groah S**. Consumer's Feedback for a Rotator Cuff Post-Surgery Rehabilitation Program for Patients with Spinal Cord Injury
ASIA Annual Meeting (Accepted for presentation, June 2008)

Kroll T, Kehn M, **Groah S**. The Role of Technology in Enhancing Quality of Life after Spinal Cord Injury: A Review of the Current Evidence Base
ASIA Annual Meeting (Accepted for presentation, June 2008)

Groah S, Gilmore B, Libin A. Introduction to Spinal Cord Injury and Disease: From Translational Research to Clinical Trials in SCI/D Medicine
.....Maintaining the Patient First Maxim.
Georgetown University Neurosciences Grand Rounds (February, 2008)

Groah S, Libin A. Best Practice in Rehabilitation Medicine
American Congress of Rehabilitation Medicine (October, 2007)

Groah S, Sabbarwal S, Boninger M. Evidence-based Spinal Cord Injury Care: Recent Clinical Practice Guidelines
American Academy of Physical Medicine and Rehabilitation Annual Assembly (September, 2007)

Libin A, Lauderdale D, Kroll T, **Groah S**. Express Problem-Based Teaching for health care professionals (E-PBT): Teaching nurses to recognize problem areas in acute care and emergency room
National Health Conference (accepted for presentation in Moscow, 2008)

Lichy A, Ljungberg I, Libin A, **Groah S**. Preserving bone health after acute spinal cord injury: What are the options?
American Paraplegia Society Annual Meeting (August, 2007)

Lichy A, Ljungberg I, **Groah S**. Preserving bone health after acute spinal cord injury: Differential response to a neuromuscular electrical stimulation intervention.
ASIA Annual Meeting (May, 2007)

Libin A, **Groah S**, Roth M. Psychosocial dimension of reabilitology: cross-cutting topics for physical disability in the context of spinal cord injury.
ASIA Annual Meeting (May, 2007)

Groah S, Townson A, DeJong G, Kroll T. Understanding and applying evidence in spinal cord injury medicine
ASIA Annual Meeting (May, 2007)

Gordon S, Ljungberg I, Neri M, **Groah S**. Challenges for the spinal cord injury peer mentor program: phenomenological observation.
International Conference on Reabilitology: The Science of Rehabilitation (Moscow, 2006)

Elrod M, Gordon S, Ljungberg I, Libin A, **Groah S**. Spinal cord injury navigator model: bridging the gap between consumers with spinal cord injury and the health care system.
International Conference on Reabilitology: The Science of Rehabilitation (Moscow, 2006)

Libin A, **Groah S**, Roth M. Psychosocial dimension of reabilitology: cross-cutting topics for physical disability in the context of spinal cord injury.

Russian Academy of Sciences (Moscow, 2006)

Groah S. Secondary conditions after spinal cord injury.
Keynote lecture at the National Rehabilitation Hospital Rehabilitation
Research and Training Center on Secondary Conditions after Spinal Cord
Injury State of the Science Conference (November, 2006)

Lichy A, **Groah S.** Prevention of bone mineral density loss after acute spinal
cord injury: interim results of an intensive neuromuscular electrical
stimulation intervention.
National Rehabilitation Hospital Rehabilitation Research and Training Center
on Secondary Conditions after Spinal Cord Injury State of the Science
Conference (November, 2006)

Groah S, Ljungberg I, Kroll T. Exercise as a self management tool in people
with spinal cord injury.
National Rehabilitation Hospital Rehabilitation Research and Training Center
on Secondary Conditions after Spinal Cord Injury State of the Science
Conference (November, 2006)

Groah S, Lichy A, Ljungberg I. Prevention of Bone Mineral Density Loss after
Acute Spinal Cord Injury: Interim Results of an Intensive Neuromuscular
Stimulation Intervention
ASIA/ISCoS Annual Meeting (2006)

Kroll T, **Groah S,** Ljungberg I. Self Care and the Prevention of Pressure
Ulcers in People with Spinal Cord Injury
ASIA/ISCoS Annual Meeting (2006)

Neri M, Gilmore B, Ljungberg I, **Groah S.**
Development of the National Rehabilitation Hospital Spinal Cord Injury Peer
Mentor Program: Lessons learned from four established programs
ASIA/ISCoS Annual Meeting (2006)

Groah S, Gilmore B. Health disparities and preventative health care for
people with physical disabilities.
Doctor's Hospital Grand Rounds, Lanham, MD (2006)

Groah S, Gilmore, B. SHIELD your health: health promotion for people with
physical disabilities.
Case Managers Society of America, Green Mtn Section Annual Conf (2006)

Groah S. An update on spinal cord injury care in private practice in the
United States
PVA National Conference (2006)

Groah S, Gilmore B. Barriers to preventive health care for people with
physical disabilities
Georgetown University Neuroscience Grand Rounds (2006)

Groah S. Bladder cancer after spinal cord injury
AAPMR Annual Meeting (2005)

Groah S. Anticipating Secondary Complications of SCI: Cardiovascular,
Osteoporosis and Bladder Cancer
Contemporary Forums (2005)

Kroll T, Gilmore B, **Groah S,** Elrod M, Towle S. Peer mentoring and patient

education supported by people with SCI: An interactive session with associated training manual
Contemporary Forums (2005)

Groah S, Kroll T. State of the Union on Health Promotion
Spinal Cord Injury Summit (2005)

Neri M, Kroll T, **Groah S**. Towards consumer-defined exercise programs for people with SCI: Focus group findings.
ASIA 31st Annual Scientific Meeting (2005)

Halstead L, **Groah S**, Palsbo S, Ho PS, McDaniels M, Nierva J. Children of SCI parents: An international registry.
ASIA 31st Annual Scientific Meeting (2005)

Rigby L, **Groah S**, Ljungberg I. Myelopathy versus traumatic SCI: An analysis of demographics, impairment, and outcomes.
ASIA 31st Annual Scientific Meeting (2005)

Groah S. Ventilatory management for the patient with high tetraplegia.
Washington Hospital Center Neuroscience Grand Rounds (Jan 2005)

Groah S. Acute spinal cord injury management and secondary conditions after spinal cord injury.
Washington Hospital Center Grand Rounds (Nov 2004)

Groah S. Neurologic issues and secondary conditions associated with cancer.
National Rehabilitation Hospital Cancer Symposium (Nov 2004)

Groah S, Kroll T, Gilmore B. Aging with spinal cord injury
National Rehabilitation Hospital (Nov 2004)

Groah S, Kroll T. An overview of secondary conditions after spinal cord injury. Webcast (March 2004)

Groah S. Pros and cons of different bladder management techniques: an interdisciplinary approach.
General session – Contemporary Forums Spinal Cord Injury: A multidisciplinary approach to today's clinical challenges (2002)

Groah S. A team approach to pressure ulcer management.
Concurrent session – Contemporary Forums Spinal Cord Injury: A multidisciplinary approach to today's clinical challenges (2002)

Groah S, Weitzenkamp D, Lammertse D. Excess risk of bladder cancer mortality in spinal cord injury.
Platform presentation – ASIA 27th Annual Scientific Meeting (2001)

Groah S, Lammertse D. Factors associated with survival after bladder cancer in spinal cord injury.
Platform presentation – ASIA 27th Annual Scientific Meeting (2001)

Groah S: Health promotion for women with disabilities.
Panel presentation – AAPMR Annual Assembly (2000)

Groah S: The use of anabolic steroids to wean a spinal cord injured patient from mechanical ventilation: Case report.
Seminar – APS 46th Annual Conference (2000)

Groah S, Weitzenkamp D, Lammertse D: Support for a causal association between indwelling catheter use and bladder cancer in spinal cord injury.
Platform presentation - ASIA 25th Annual Scientific Meeting (1999)

Groah S, Charlifue S, Weitzenkamp D, Whiteneck G: The risk of coronary heart disease in the aging spinal cord injured.
Platform presentation - AAPMR Annual Assembly (1997)

Kaitz E, **Groah S**, Miller M, Cifu D: The tetraplegic hand: Acute and long-term management options.
Seminar - AAPMR Annual Assembly (1997)

Groah S, Charlifue S, Weitzenkamp D, Whiteneck G: Risk factors for cardiac complications in long-term spinal cord injury.
Platform presentation - ASIA 23rd Annual Scientific Meeting (1997)

Groah S, Miller M, Cifu D, Rowland T: Developing a regional sports and recreation program for the physically-challenged.
Focus Session – AAPM&R Annual Assembly (1995)

Poster Presentations

Lauderdale M, Libin A, **Groah S**, Wand M, Triyono B, Spungen M, Myers C. Development of an interactive storytelling-based injury prevention learning program for young children.
American Public Health Association Annual Meeting 2008 (Accepted for presentation)

Lichy A, Field-Fote E, **Groah S.** Cardiac and Metabolic Benefits with Robotic-Assisted Gait Training After A Spinal Cord Injury
ASIA 2008 Annual Conference (Accepted for presentation)

Lauderdale L, Libin A, Spungen M, Myers C, **Groah S.** Insights into understanding of safety and injury prevention in 2-5 year old children
ASIA 2008 Annual Conference (Accepted for presentation)

Kroll T, Kehn M, **Groah S.** Pain self-management after spinal cord injury (SCI): a review of the evidence base.
15th Interurban Spinal Cord Injury Conference (October, 2007)

Kroll T, Kehn M, **Groah S.** Self management of pain after spinal cord injury: a review of the evidence base.
ASIA Annual Meeting (May, 2007)

Kroll T, Kehn M, **Groah S.** Predicting secondary conditions based on physical activity: results from a nation-wide survey.

ASIA Annual Meeting (May, 2007)

Kroll T, Kehn M, **Groah S**. Experiences with the management of pain through physical activity after spinal cord injury
ASIA Annual Meeting (May, 2007)

Libin A, **Groah S**. Psychosocial rehabilitation: Preliminary classification cross-cutting domains in the context of spinal cord injury
ASIA Annual Meeting (May, 2007)

Ljungberg I, **Groah S**. A comparison of spinal cord injury versus spinal cord disease.
ASIA Annual Meeting (May, 2007)

Groah S, Hamm L, Jadwin E, Ljungberg I, Martins S, Nash M. Nutrient intake by injury level after SCI
ASIA/ISCoS Annual Meeting (2006)

Kroll T, Kehn M, Ho PS, Neri M, **Groah S**. Development and Psychometric Characteristics of the SCI Exercise Self-Efficacy Scale (ESES)
ASIA/ISCoS Annual Meeting (2006)

Kehn M, **Groah S**, Neri M, Kroll T. Promoting Receipt of Preventive Services among Adults with SCI and MS
ASIA/ISCoS Annual Meeting (2006)

Hamm L, Nash M, Jadwin E, Martins S, **Groah S**. Exercise Capacity in Persons with Chronic Spinal Cord Injury
ASIA/ISCoS Annual Meeting (2006)

Nash M, Gintel S, Mendez S, Hamm L, Lewis J, **Groah S**. Elevated hsCRP and Vascular Disease after SCI: Inflammatory Epiphenomenon Pathologic Agent?
ASIA/ISCoS Annual Meeting (2006)

Kroll T, **Groah S**, Gilmore B, Neri M, Elrod M. Consumer directed SCI education of nurses and medical residents: First experiences with the Consumer Professional Partnership Program (CPPP).
ASIA 31st Annual Scientific Meeting (2005)

Wun C, **Groah S**. Bladder cancer occurring in a defunctionalized bladder.
ASIA 27th Annual Scientific Meeting (2001)

Yung J, **Groah S**. Crohn's disease in the acute spinal cord injury patient. Diagnostic challenges in the rehabilitation setting.
AAPMR Annual Assembly (2000)

Groah S, Menter R: Long-term cardiac ischemia leading to coronary artery bypass grafting in a tetraplegic.
APS 43rd Annual Conference (1998)

Groah S, Miller M, Cifu D: Developing a community-based disabled sports program.
AAPM&R Annual Assembly (1995)

Miller M, **Groah S**, Cifu D: Psychologic benefit of a community-based adaptive ski program: a survey.
AAPM&R Annual Assembly (1995)

Groah S, Cifu D: The rehabilitative management of the traumatic brain injured polytrauma patient with associated femoral neuropathy.
AAPM&R Annual Assembly (1992)

Professional Activities

Research Committee Chair – American Spinal Injury Association
(2007-present)

Ad Hoc Grant Reviewer – Craig H. Neilsen Foundation (2007-present)

Item Writer – American Board of Physical Medicine and Rehabilitation
SCI Subspecialty Examination (2006-present)

Workgroup member - Work Group to develop action steps to implement the Surgeon General's Call to Action to Improve the Health and Wellness of Persons with Disabilities (2006)

Expert Panel Participant – Paralyzed Veteran's of American Spinal Cord Injury Consortium Clinical Practice Guideline on Bladder Management after Spinal Cord Injury (2003-2006)

Invited participant – 2005 White House Conference on Disability & Aging

Manuscript review – *Archives of Physical Medicine and Rehabilitation*
Journal of Spinal Cord Medicine
American Journal of Physical Medicine and Rehabilitation
Spinal Cord

Grant review – Paralyzed Veterans of America

Physician examiner for North American Institute of Orthopedic Manual Therapy

Committee Member – American Spinal Injury Association Research Committee (2005-2007)

Committee Member – American Spinal Injury Association Standards Committee (2004-2006)

Community Activities and Honors

Spinal Cord Injury Hall of Fame Nominee
2007 National Spinal Cord Injury Association

Wolf Trap National Park for the Performing Arts
Volunteer Medical Coverage
2006 - present

1996 Atlanta Paralympics Team Physician
August 15 - 25, 1996

CEO Emeritus Richmond Athletes with Disabilities-Sports
August 1, 1996 – present

Founder and CEO of Richmond Athletes with Disabilities, a non-profit organization providing recreational activities for the physically-challenged
March 1, 1994 - August 1, 1996

International Stoke-Mandeville Wheelchair Games USA Team
Physician
July 21 - August 1, 1995

Xerox Qualifying Trials and International Paralympic Qualifying Even
Resident Physician Coordinator
July 5 - 8, 1995

1995 National Wheelchair and Amputee Championships Team
Physician
June 21 - 25, 1995

References

References available upon request.